

Remarks

The undersigned's Remarks are preceded by related comments of the Examiner, presented in small bold-faced type.

1. **The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.**

The following title is suggested: Electronically Linking, Animating, and Folding Drawing Views.

The Title has been amended to "Electronically Folding Drawing Views."

2. **The abstract of the disclosure is objected to because it does not adequately describe the invention as claimed.**

A replacement abstract sheet is provided herewith and is believed to be in proper form.

6. **Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, applicant does not specify what "the conventional drafting standard" is, and claims 36 and 37 are clearly evidence that applicant is aware of relevant standard(s) in the art, and thusly reciting bland language such as "the conventional drafting standard" makes it impossible for examiner to know what, specifically, applicant is referring to. One of ordinary skill in the art would not be able to determine from the claims and the specification the scope of this claim as set forth above.**

In this specific instance, there is no language in the specification supporting a specific or generic class of standards as conventional, so applicant cannot claim that he is acting as his own lexicographer because there was no implicit or explicit disclaimer to that effect, and no explicit or implicit definitions provided to support that position.

It is acknowledged that the term "conventional drafting standard" may be subject to broad interpretation. However, one of skill in the art would have a reasonable understanding of what constitutes a "conventional" drafting standard. This is shown by prior art cited by the Examiner in this very matter. For example, Hanratty 13:36-39 states that the "positioning of views is standardized within the drafting community in order to facilitate graphical communication"; thus demonstrating that there are understood "conventional" drafting standards within the drafting community.

Although the phrase "conventional drafting standard" may be subject to broad interpretation among those of skill in the art, this is not a grounds for rejection. See, e.g., MPEP 2173.04 which states, in part:

2173.04 Breadth Is Not Indefiniteness

Breadth of a claim is not to be equated with indefiniteness. *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). If the scope of the subject matter embraced by the claims is

clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. 112, second paragraph.

In view of the foregoing, it is respectfully requested that the Examiner withdraw the rejection under § 112 ¶ 2.

It is further noted that, contrary to the Office's suggestion, it is not necessary that the applicant act as his "own lexicographer" with regard to this phrase because the applicant does not intend to redefine "conventional," rather "conventional" is to be given its ordinary meaning.

8. Claims 7-9, 29, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanratty (US 5,990,897).

9. As to claims 7 and 29,

A computer-implemented method of arranging a plurality of views of a three-dimensional model, the method comprising: (Hanratty 1:10-35, 3:10-55)

-Displaying the plurality of views on a computer screen in an arrangement wherein the arrangement represents a computer-aided design drawing layout; (see Fig. 3; Fig. 1B, multiple 2D surface layouts, 1:10-35, particularly 3:10-55, specifically 3:30-43; 5:49-6:30)

-Selecting a first view from the plurality of views; (particularly 3:10-55, specifically 3:30-43; 5:49-6:30 - in 7:5-30, the drawings are processed and in 7:45-55 discusses finding or selecting the plan or main view of the drawings)(Fig. 3 clearly illustrates this, with the multiple two-dimensional views being shown on the screen simultaneously.)

-Selecting a second view from the plurality of views; and (clearly in 7:5-30 and 8:15-45, all the objects in all views are first correlated with each other, then the main or plan view is selected, with other view(s) then being selected, and the relationships between the components present in the second or subsequent view(s) to the position of said components in the main or plan view being correlated as set forth above) (Fig. 3 clearly illustrates this, with the multiple two-dimensional views being shown on the screen simultaneously.)

-Automatically moving at least one of the first view and the second view to position the first view and the second view in closer proximity to one another thereby creating a new arrangement representing a new layout. (Clearly, as shown in Fig. 3, multiple two-dimensional views shown on the screen simultaneously via software are well known in the art. In 6:10-45, it is taught clearly that the user may organize the views in the view set manually, or the system can do it automatically. This clearly establishes that the user can configure the overall view set one-way or the other, and by moving views around.)

Reference Hanratty clearly teaches all of the limitations. Clearly, as set forth above, in Fig. 3 Hanratty teaches the display of a plurality of views of a drawing, and that the software will automatically select the plan view as the first view set forth above. Then the user can manually select other desired view(s) or have the software perform that tasking, as set forth above. Clearly, in Fig. 3 various views are shown arranged around the plan view, as the above-cited sections of Hanratty clearly suggest that they would be. Additionally, there is a 1:1 correspondence between Fig. 5 of applicant's drawings and Fig. 3 of Hanratty - same number of views presented, etc.).

Obviously, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hanratty to allow the user to move the multiple views of the object in one window around, as Hanratty clearly establishes that the views can be presented in multiple windows (6:8-40) or in one window (Fig. 3).

The independent claims of the present application have been amended to further clarify the claimed subject matter and to make clear that a rearrangement of views into a second drawing is provided by the use of transformation matrices.

The Office's basis for rejection are traversed.

The Examiner's rejection is respectfully traversed for at least the reasons set forth below.

The cited prior art does not shown all elements required to support a 103 rejection

The Office, in its rejection, states that at the time the invention was made it would have been obvious to modify Hanratty "to allow the user to move the multiple views of the object in one window around." However, the claim is not directed to merely allowing the user to reposition views, but rather, is directed to a method for automating such a movement. Even if one were to accept the suggestion that it is "obvious" to allow for a user to (manually) move such views, as the Office has suggested, the algorithms and procedures required to enable an automatic movement of views as recited by the claims is not taught or suggested in the cited art. For example, the prior art does not teach or suggest at least the element of "forming a second drawing layout comprising the selected views wherein said second drawing layout is formed by applying a transformation matrix to views shown in the GUI window to automatically reposition the views for display in the second drawing layout wherein, in the second drawing layout, the first view and the second view are shown in a different positions with respect to each other than in the first drawing layout" as recited by the amended claims. Because the prior art does not teach or suggest all elements of the claim, a rejection under § 103 is not proper and it is respectfully requested that it be withdrawn.

The Examiner's Reliance on allegedly "obvious" knowledge is traversed.

To the extent that the Examiner, in his comments, has or would suggest that the subject matter of forming different arrangements of drawing views as recited by the claims is "obvious," the applicant respectfully traverses this suggestion. The undersigned and applicant know of no teaching or suggestion that views of a three dimensional drawing once rendered in a graphical user interface window are to be automatically rearranged into drawing views as recited by the amended claims.

Furthermore, it is respectfully submitted that the Office's suggestion of what is "obvious" does not meet the standards for the taking of Official Notice. The MPEP clearly states the standards for the Office's taking notice of alleged facts:

Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. ...

It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. For example, assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art. *In re Ahlert*, 424 F.2d at 1091, 165 USPQ at 420-21. See also *In re Grose*, 592 F.2d 1161, 1167-68, 201 USPQ 57, 63 (CCPA 1979) (“[W]hen the PTO seeks to rely upon a chemical theory, in establishing a prima facie case of obviousness, it must provide evidentiary support for the existence and meaning of that theory.”); *In re Eynde*, 480 F.2d 1364, 1370, 178 USPQ 470, 474 (CCPA 1973) (“[W]e reject the notion that judicial or administrative notice may be taken of the state of the art. The facts constituting the state of the art are normally subject to the possibility of rational disagreement among reasonable men and are not amenable to the taking of such notice.”).

It is never appropriate to rely solely on “common knowledge” in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based. [*In re*] *Zurko*, 258 F.3d [1379] at 1385, 59 USPQ2d [1693] at 1697 [(Fed. Cir. 2001)] (“[T]he Board cannot simply reach conclusions based on its own understanding or experience or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings.”). While the court explained that, “as an administrative tribunal the Board clearly has expertise in the subject matter over which it exercises jurisdiction,” it made clear that such “expertise may provide sufficient support for conclusions [only] as to peripheral issues.” *Id.* at 1385-86, 59 USPQ2d at 1697. As the court held in *Zurko*, an assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support. *Id.* at 1385, 59 USPQ2d at 1697. See also *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002) (In reversing the Board’s decision, the court stated “‘common knowledge and common sense’ on which the Board relied in rejecting Lee’s application are not the specialized knowledge and expertise contemplated by the Administrative Procedure Act. Conclusory statements such as those here provided do not fulfill the agency’s obligation. The board cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies.”).

MPEP 2144.03(A) (emphasis in original).

It is respectfully submitted that the subject matter of which the Office has taken notice is “not capable of instant and unquestionable demonstration as being well-known,” *id.*, and that the

undersigned knows of no manner for instantly and unquestionably demonstrating that such subject matter is well known. Further, it is submitted that the Examiner appears to have relied on his understanding of “‘common knowledge’ in the art . . . as the principal evidence upon which a rejection was based,” *id.*, which in accordance with the MPEP it is inappropriate to do “without evidentiary support in the record,” *id.*

The MPEP clearly states the standard required for traversing such Official Notice and the undersigned submits that this standard has been met and the Official Notice traversed:

To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner’s action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. . . . If applicant adequately traverses the examiner’s assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained. See 37 CFR 1.104(c)(2). See also *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 (“[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings” to satisfy the substantial evidence test).

MPEP 2144.03(C). The MPEP, furthermore, states the requirements for an Examiner’s continued reliance on personal knowledge after such traverse:

If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding. See 37 CFR 1.104(d)(2).

Id.

Applicant respectfully submits that, to the extent the Office’s rejection is based on assertions that a fact is well-known or is common knowledge in the art, such assertions have been made without sufficient documentary evidence. Applicant respectfully suggests that the Office’s “obviousness” assertions are not “capable of instant and unquestionable demonstration as being well-known,” MPEP 2144.03(A), and have been appropriately traversed in accordance with the standards set forth in MPEP 2144.03(C).

10. As to claim 29,

The claim is substantially similar to claim 7, with the only differences as follows: claim 7 is drawn to arranging views, whereas claim 29 is drawing to rearranging views. ... The second difference is that claim 29 automatically creates a new drawing layout with the views in proximity to each other, with at least one in a new location on the computer screen. ...

Claim 29 includes limitations drawn to the “automatic” repositioning of views in a GUI window. For at least the reasons cited with respect to claim 7, this claim is patentable over the prior art.

11. As to claims 8 and 34, ...

- 13. As to claim 9, ...
- 14. As to claims 35 and 36, ...
- 16. As to claim 10, ...
- 17. Claims 11-12 and 32-33 ...
- 20. As to claims 32 and 33, ...
- 22. As to claims 30 and 37, ...

Claims 8-11 and 30 – 37 depend, directly or indirectly, from either independent claim 7 or 29 and are patentable for at least the reasons cited with respect to claim 7 and 29.

Conclusions

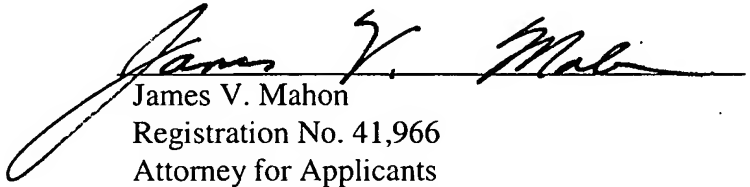
Claims 7, 8, and 29, 34, 37 have been amended, claim 12 has been cancelled, and claims 38 - 46 have been added. Claims 7-12 and 29- 42 are now pending and believed to be in condition for allowance. Applicant respectfully requests that all pending claims be allowed.

Please apply any credits or excess charges to our deposit account number 50-0521.

Respectfully submitted,

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